ABSTRACT

A method of recovering texture information for an error block in a video stream includes applying an edge detection spatial filter on blocks surrounding an error block to detect texture edges, each block containing a plurality of pixels, and identifying first pixels surrounding the error block having texture data above a predetermined threshold value, selecting first pixels and checking the texture data of pixels extending from the selected first pixel in a plurality of predetermined directions for determining a direction of the texture edge, accumulating the edge detection filtering results of pixels that are located on the texture edge in a selected direction, determining the filtering weights corresponding to each direction of the texture edge based on the filtering results of pixels checked in the predetermined directions, and reconstructing the texture of the error block in the spatial domain using weight filtering based on the texture data of surrounding pixels.